



ISSN 0852-601X
e-ISSN 2549-838X

Available online at
<http://www.pancaranpendidikan.or.id>

*Pancaran Pendidikan FKIP
Universitas Jember
Vol. 8, No. 2, Page 11-20, May, 2019*

Pancaran Pendidikan

DOI:
[10.25037/pancaran.v8i2.226](https://doi.org/10.25037/pancaran.v8i2.226)

The Role of Education and Knowledge Science of Digital Era in The Perspective of Critical Thinking Teaching Method Norman Fairclough

Putri Retnosari¹, Rizal Mustansyir¹, dan Hastanti Widy Nugroho¹

¹Universitas Gadjah Mada, Yogyakarta, Indonesia

Email: putriretno92@gmail.com*

ARTICLE INFO

Article History:

Received Date: 1th April 2019
Received in Revised Form Date:
10th April 2019
Accepted Date: 15th April 2019
Published online Date 01st May
2019

Key Words:

**Knowledge Science, Critical
Thinking**

ABSTRACT

The research entitled " The Role Of Education And Knowledge Science of Digital Era In The Perspective of Critical Thinking Teaching Method Norman Fairclough" is motivated by challenges that bring together the increasingly complicated world of education and science in the digital age, only that there is something in accordance with the questionable model offered, which also attracts human interest in pseudo truth and information. The critical discussion method offered by Fairclough has opened new horizons for education and science so that it is not difficult to offer free sophistication and sophistication, because developments in the digital age are also recognized as having a negative impact on humans. This research is a qualitative research using the literature method. Norman Fairclough, meanwhile the material objects used in this study are the basic concepts of research and research methods. After conducting a search in this study, the results obtained are (1) the formulation of critical thinking on the concepts of education and science (2) Finding education in the digital age by using five basic concepts that were initiated historical, power and ideology.

Copyright © Putri et al, 2019, this is an open access article distributed under the terms of the Pancaran Pendidikan Journal license, which permits unrestricted use, distribution and reproduction in any medium, provided the original work is properly cited

INTRODUCTION

Fairclough a philosopher from England was concentrated with the views of Paulu Freire who had a critical view of education and learning. However, aside from thinking with Freire who considers awareness as part of special learning in language learning, Fairclough and assumes that critical language study requires that knowledge in language learning can only be used outside as a language that can be imitated or discussed with language. According to Fairclough the development of critical awareness

of the world should be the main objective of education, including language education. The important educational goal is to create awareness for students. Critical language study discusses how language rules and language practices are implanted together with power relations and ideological processes that are often not realized by humans (Fairclough, 1995: 8).

The challenge of the world of education today is the digital era, which is a time when humans use digital media as a means of communication, information search, sources of truth, sources of knowledge, fulfillment of needs, and so forth. In the digital age, people are also required to quickly understand, know, and be able to use technology that continues to grow. Similarly, experienced by students, who can not be separated from the use of digital. The world of education is also often formally rivaled by the digital era, because the convenience offered by the digital era is more attractive to children and even for all types of ages who prefer to use digital media than conventional learning concepts. The form of the digital era is also a symbol of globalization in the world, namely the process of international integration that occurs due to the exchange of world views, products, thoughts, and other aspects caused by the progress of infrastructure, telecommunications, transportation and the internet.

The digital age as a sign of the presence of technology is increasingly skyrocketing and indeed can not be avoided. The development of digital is increasingly widespread, and then gave birth to the development of science and technology (Science and Technology), so that in the digital age not only developing technology but also developing science. This is evident from time to time, in the digital era, humans have succeeded in developing science and technology. The rhythm of this development then makes people forget the negative side of science and technology because they fall asleep with the conveniences offered

The phenomenon of the development of the digital era is proven by Santosa (2002: 2) who said that the development of digital products was in fact a double-edged sword. On the one hand digital products help facilitate human work, while on the other hand digital products can erode human civilization itself. This is evidenced by the existence of digital products that make people easily replaced by the latest technology. Like the emergence of machines in industrial plants that are able to shift the position of humans. Thus, the latest challenge in education and science in the digital era today is to collaborate in harmony.

METHODOLOGY

The role of education and science in the digital world attracts the writer's attention for philosophical review. Knowledge that has indeed developed in tune with the civilization of the times cannot be denied or stopped, but a critical perspective is needed in addressing this. Philosophical understanding of science is necessary because humans without morals will make humans like inverted guns, meaning that they can kill humans themselves. As said by Hadi (1996: 159) freedom without tradition will plunge humans into anarchy while traditions without freedom or creativity make people stunted and die. That means digital is important and needed, but critical attitude is also needed.

Norman Fairclough offers a critical teaching needed in today's digital phenomena. One of the critical teaching tasks is engaging mental processes such as paying attention, categorizing, selecting, and deciding on a certain condition. The result is the ability to solve a problem and manage a challenge. Likewise, in the concepts of education and

science when it involves critical thinking, it is easy to find boundaries between what is necessary and unnecessary, important and not the main, between pseudo. Also real. Therefore, this research is interesting to do because it opens new awareness about the role of science and education in the current digital era.

RESULT AND DISCUSSION

The withdrawal of Fairclough's view of the concept of critical teaching, starting with his opinion when quoting the opinion of Freire an educational philosopher, as follows:

"Is it a raindrop, a singing bird, a moving bus, a ferocious person on the street, a sentence in the newspaper, a political speech, a rejection of love or whatever. We must use critical views, such as those who ask, who doubt, who investigate, and whoever makes the light of the life we live (Freire, 1985; in Clark 1988: 32)
"

The concept of teaching or learning is realized Fairclough stems from the concept of language. First of all Fairclough realizes that in language there is awareness, then Fairclough in the book "Critical Language Awareness" mentions the existence of awareness in language. This belief led Fairclough to the importance of the social aspects of language, specifically aspects of the relationship between language and ability. The term language awareness has been introduced since the early 1980s (Hawkins, 1984 and NCLE 1985).

Before Fairclough discovered the theoretical framework for critical discourse analysis. Fairclough pays attention to the relationship between language, power and ideology. On the basis of his thought, an article entitled "Language and Power" was born and at its peak he succeeded in finding a critical Discourse Analysis framework consisting of text analysis, analysis of the process of producing text and sociocultural analysis of the discourse of the situation when the text occurred. These three main frameworks are work tools used by Fairclough in using critical discourse analysis. This is evidenced by the opinion of Fairclough (1995: 23).

According to Fairclough, Discourse as a social praxis directs its focus to analyze institutions, organizations, group relations, structures, political and social processes to be studied at the level of discourse, communication and interaction. So Critical Discourse Analysis interrogates and explains the relationship between the two studies, including local and global interface, and the structure of discourse and the structure of society. These relationships are part of the process of semiosis (Haryatmoko, 2016: 23)

1. Get to know Norman Fairclough

Norman Fairclough is a lecturer in Modern Linguistics and English at Lancaster University. Fairclough pays attention to the study of change and the practice of critical and interdisciplinary discourse, which deals with social and cultural change. The most famous publication entitled "Language and Power" was published by Longman in 1989, and Discourse and Social Change published by Polity Press in 1991. Fairclough focused on Critical Discourse Analysis (CDA) since the early 1980s and began its involvement in political activities. Fairclough believes that "language" or what he calls "discourse", is a form of element in the production and maintenance of social-economic order in the form of political

struggle for a better order. The following is a brief description of Norman Fairclough's intellectual work taken from his official blog:

“First, in the 1970s, research focused on discourse (ideological character) in the maintenance of social relations and power structures (eg *Language and Power*, 1989). Second, the transformation of neo-liberal capitalism over the next 30 years, and CDA's research focuses on how the discourse figures in these economic, political and social changes. I pay little attention (though not enough) to opposing neoliberalism in discourse. This concern preoccupied me the most, with program books (*Discourse in Social Change*) published in 1995 (see also my book with Lillie Chouliaraki, *Discourse in Modernity Late* 1999), and more focused studies (eg marketing the higher education market, *New Workers, globalization*) is reflected in the revised and extended second edition of *Critical Discourse Analysis* (2010) and *New Workers, New Languages?* (2000) and *Language and Globalization* (2006). I started working on CDA in the early 1980s (the language I used at that time was "critical language awareness", which I wrote in *Journal of Pragmatics* 9 1985). Actually this has something to do with academic work with my political activities. CDA for me has always focused on language / discourse as an element in the production, maintenance and transformation of the existing socio-economic order and in the political struggle for a better order”

Norman Fairclough is one of the critics of discourse analysis which views that the understanding of discourse so far has been dominated by descriptive paradigms that are noncritical so that many dimensions of discourse have not been revealed (Santoso, 2003: 48). Fairclough is famous for the concept of discourse that involves all elements, which are important to contain the mandate and complex intentions. Norman Fairclough was born in 1941, and is currently still actively writing and conducting research related to Critical Discourse Analysis. The famous Fairclough critical discourse analysis model is the social change model, which integrates together discourse analysis based on linguistics, socio-political understanding of social change.

In addition, Norman Fairclough is a professor in the field of linguistics. He obtained a professor degree on the campus where he served, namely in the Department of Linguistics and English at Lancaster University. The Critical Discourse Analysis concept that he initiated is related to the power in language. Even though research conducted by Fairclough leads to communication studies, Fairclough is not a communication science academic. Fairclough is one of the philosophers who developed the analysis of critical discourse which is a branch of the critical study of discourse with linguistics. Fairclough pays attention to the placement and function of language in special social relations with dominant forces and ideologies.

2. People who influence Fairclough

Fairclough several times mentions Habermas in the book "*Language and Power*", especially in explaining the concept of the discourse order in society.

That there is a discourse of action of hidden domination. This structured order can be seen in discourse, as Fairclough said "The social tendencies identified by Habermas can be seen as imposed in the struggle by the dominant bloc, and as involving the de-structuring of previous societal orders of discourse (2001: 164)

Fairclough also borrows Althusser's concept in explaining interpretation, or planting between people, fairclough believes that the text "places" a meaning that is preferred over other meanings. On that basis the reader can offer content that is the opposite. The absolute requirement for critical thinking is that the reader does not readily agree with the text, if the reader agrees with the text it is very difficult to read critically. Meanwhile, the ability to challenge the text is very important for the reader, this is what is referred to as the interpretation of the text of the reader.

The difficulty of interpretation is that the reader is usually unconscious and the text manages to subdue it. Like the language managed to create a position for humans. Like, we do not need to be named as "patients" when entering a doctor's office, or do not need to be named as "people" when entering the area of the presidential palace. The reader becomes interpreted when the construction is affixed "accordingly". The reader does not realize that he has been placed in the "subject" position. It is this act of accepting the subject's position that causes the reader to surrender to the power of the intemplantor. As stated Althusser follows:

"Ideology acts or functions in such a way that it recruits subjects from individuals or turns individuals into subjects, through very precise operations, which I call interpretation or calling, and which can be imagined to be equivalent to other vocations in everyday life. For example, the person who is called "hey, you" then the person turns around. with only a 180 degree body bend, he can become a subject. Why? Because he acknowledges or considers that the call is only for him not to others (Althusser, 1970: 48) "

Fairclough was also impressed by the views of Paulu Freire who had a critical view of education and learning. For Fairclough the development of a critical awareness of the world, should be the main objective of education, including in language education.

3. The process of critical thinking

The process of critical thinking is understood by Fairclough through a method he calls Critical Discourse Analysis. Before discussing further about the analysis of critical discourse, it is necessary to first understand the fundamental concepts of discourse. The discourse according to the Big Indonesian Dictionary (KBBI) online has 5 word meanings namely (1) verbal communication; conversation, (2) the whole speech which is a unity, (3) the most complete language unit realized in the form of a complete essay or report, (4) the ability or procedure of thinking systematically; the ability or process of giving consideration based on common sense, (5) verbal exchange of ideas. Then the meaning of discourse according to Kridalaksana's linguistic dictionary (1982: 180) is the most complete language unit; in grammatical hierarchy is the highest or largest grammatical unit. Discourse is realized in the form

of a complete composition (novels, books, encyclopedia series, etc.), paragraphs, sentences or words that carry the full mandate. Based on the two meanings of the word discourse presented in KBBI online and the linguistic dictionary by Harimurti Kridalaksana have the same meaning, namely discourse is the most comprehensive language unit embodied in an intact writing in the form of essays and reports. KBBI gives a broader meaning that discourse is not only realized in written form but can also be realized in the form of speech utterances. The thought process can also be regarded as a discourse according to the online KBBI. Based on this, it can be seen that discourse is actually something that is very complex because discourse is not only interpreted as a product but also interpreted as a process. So it can be concluded that in analyzing a discourse it is not enough just to analyze what has been written and what is said, but the thought process of what happens behind the written and spoken words must also be analyzed. It aims to uncover the meaning and purpose contained in the discourse holistically

To see what goals are contained and what thought processes occur in a discourse, discourse analysis can be used as a knife of analysis. Discourse analysis is a method that can be used to dissect a discourse. As said by Fairclough (2010: 12) discourse analysis has now become a very diverse area of study with a variety of approaches in each of a number of disciplines which means that discourse analysis is now a diverse field of study with many approaches in each discipline of science. . This shows that discourse analysis can be used in all diverse fields of science with their respective approaches. Analysis of discourse today is not only used in the field of linguistics to analyze discourse in traditional grammar, but can also be used to analyze discourse in other fields, for example, such as the social field.

As Fairclough said in the quote above, discourse analysis has very diverse approaches in each discipline. Fairclough uses a socio-cultural analysis approach, such as an approach which will be particularly useful for investigating change in language, and will be usable in studies of social and cultural change, meaning that it is an approach that will be very useful for investigating changes in language and will can be used in studies of social and cultural change.

In formulating the proposed approach, Fairclough has surveyed various approaches in discourse analysis. In a survey conducted Fairclough divides the existing approaches into two groups based on social orientation in a discourse, namely the "critical" and "non-critical" approaches. Fairclough (2010: 105) explains Critical approaches differ from non critical approaches in not just describing discursive practices, but also shows how discourse is shaped by relations of power and ideologies, and the constructive effects discourse has upon social identities, social relations, and systems of knowledge and belief, neither of which is normally apparel to discourse participants. This means that the critical approach is different from the non-critical approach. Not only in describing discursive practices, but also shows how discourse is shaped by power relations and ideology and the constructive effects of discourse on social identity, social relations, and systems of knowledge and belief. None of these things appear to participants in the discourse. This quote can be interpreted that critical and non-critical discourse not only differ in the form of practice, but also differ in the thought process of discourse makers that relates to the power and ideology they carry. So what is contained in the discourse can affect

social identity, social relations, knowledge systems and even beliefs, but usually discourse participants are not aware of these things.

Fairclough said that discourse studies have 3 main keywords, including language, ideology and power. Social research in critical discourse analysis is a form of text analysis and has a focus of attention on critical language awareness. The three keywords that Fairclough is referring to are the basis of critical discourse analysis. When conducting research using Critical Discourse Analysis theory it cannot be separated from language, ideology and power. "The three papers in the first section (language, ideology, and power) reflect my early (roughly 1983-87) concerns in this field with the development of an analytical framework - a theory and method - for studying language in its relation to power and ideology" (Fairclough, 1995: 1).

The framework of the critical thinking method developed by Fairclough aims to unlock hidden dominations. The workings of the method of critical thinking are against the forms of oppression domination that are subtly manifest in linguistic form. The focus of Fairclough in the method of critical thinking is to observe the presence of discourse, so that it can control how a text is produced, distributed until it becomes public consumption. The real form of discourse is not merely a text but also a sociocultural form so that it rotates like a natural thing.

Discourse is the process of developing communication, which uses symbols, which are related to interpretations and events, within a broad social system. Through the discourse approach to communication messages, such as words, writings, pictures, etc., their existence is determined by the people who use them, the context of the events that pertain to them, the situation of the wider community underlying their existence, etc. . All of these can be in the form of values, ideology, emotions, interests, and so forth.

Menurut Fairclough, setiap teks berpotensi memuat ideologi. Bentuk lain dari teks yang menyimpan kuasa ideologi termasuk juga berupa kosakata metafora, tata bahasa, prasangksesta dan implikatur. "*A range of properties of texts is regarded as potentially ideological, including features of vocabulary and metaphors, grammar, presuppositions and implicature, politeness conventions, speech-ex-change (turn taking) systems, generic structure, and style* (Fairclough, 1995:3)".

4. Education and Science using the Critical Thinking Method

Analysis with Critical Thought steps can be passed through stages of thought (Wodak, 2009: 96) include:

- a. Activating and consulting prior theoretical knowledge
- b. Systematic collection of data and information
- c. Data selection and preparation for special analysis
- d. Specifications of research analysis and formulation of assumptions
- e. Qualitative analysis of the guide
- f. Study of cases in detail
- g. Formulation of criticism
- h. Application of detailed analysis results

Based on the above stages, it can be concluded that the role of science and education in the digital age requires:

- a. Understanding conventional teaching in order to obtain basic knowledge or roots of knowledge

- b. Integrate digital media with conventional media to formulate a systematic learning process
- c. Selecting the use of media that is less effective and can lead to misguided thinking.
- d. Determine learning objectives and research formulation
- e. Temporarily formulate the results of qualitative research with students
- f. Individual assignments by asking questions that are not digital answers to trigger critical thinking elements
- g. Formulation of criticism
- h. Presentation of the results of critical thinking among students in detail

Meanwhile, it needs to be understood that the act of critical thinking in the digital age is a form of thought that includes action, context, history, power and ideology.

1. Actions

The first principle that must be understood is science and the concept of education are actions. Thus, education and science are the processes of knowledge transfer that are associated as a form of interaction. Education and Science are not placed as in closed and internal spaces. Education and Science are seen as something that aims, whether to influence, debate, persuade, refute, react, and so on. In addition, Education and Science are also understood as something that is expressed consciously, controlled, not something that is out of control or expressed outside of consciousness.

2. Context

In this case consideration is needed in the context of Education and Science such as settings, situations, events and conditions. Education and Science in this case are produced, understood, and analyzed in a particular context. Referring to Cook's view (Badara, 2012: 30), Education and Science also examine the context of communication: who communicates with whom and why; in what types of audiences and situations; through what medium; how are the different types of communication development; and relationships for each of each. The study of language here includes context, because language is always in context and there is no act of communication without participants, intertext, situations, and so on. However, not all contexts are included in the analysis, only those relevant and influential on the production and interpretation of texts included in the analysis.

3. History

Placing Education and Science in certain social contexts means Education and Science are produced in certain contexts and cannot be understood without including the accompanying context. For example, conducting a critical analysis of student leaflet texts opposing Suharto. Understanding of these actions can only be obtained if it can provide the historical context in which the text was made; for example, the social political situation, the atmosphere at the time.

4. Power

The next thing to consider is the element of power in Education and Science. Every concept of Education and Science that emerges needs to be viewed more closely as something natural, natural, and neutral but needs to be further investigated for any form of power struggle in it.

5. Ideology

Ideology has two opposite meanings. Positively, ideology is perceived as a worldview that states the value of certain social groups to defend and advance their interests. As for negatively, ideology is seen as a false awareness, which is a need to commit fraud by distorting people's understanding of social reality. An understanding in Education and Science can never be separated from ideology and has the ability to manipulate the reader towards an ideology.

CONCLUSION

Based on the above analysis it can be found that the process of critical thinking is understood through Fairclough's method called Critical Discourse Analysis. In formulating the proposed approach, Fairclough has surveyed various approaches in discourse analysis. In a survey conducted Fairclough divides the existing approaches into two groups based on social orientation in a discourse, namely the "critical" and "non-critical" approaches. Critical and non-critical discourse not only differs in practice but also differs in the thought processes of discourse makers that relate to the power and ideology it carries. So what is contained in the discourse can affect social identity, social relations, knowledge systems and even beliefs, but usually discourse participants are not aware of these things.

Based on the above stages, it can be concluded that the role of science and education in this digital era requires. First, conventional teaching understanding in order to obtain basic knowledge or roots of knowledge. Second, integrating digital media with conventional media to formulate a systematic learning process. Third, select the use of media that is less effective and can lead to misguided thinking. Fourth, determine learning objectives and research formulations. Fifth. Temporarily formulate the results of qualitative research with students. Sixth, the assignment of tasks individually by giving questions that are not digital answers to trigger critical thinking elements. Seventh, Formulation of criticism. Eighth, the explanation of the results of critical thinking among students in detail

REFERENCES

- Bahm, J. Archie. 1980. What is "Science"?. Albuquerque: World Books.
- Fairclough, N. 1995. *Kesadaran Bahasa Kritis*. Longman Singapore Publishers: Singapura
- _____. 1955. *Critical Discourse Analysis: The Critical Study of Language*. Harlow: Pearson

_____ 2001. *Language and Power Second Edition*. Pearson Education Limited: London

Franz Magniz-Suseno. 1991. *Etika Sosial*. Gramedia: Jakarta

Hadi, Hardono. 1994. *Epistemologi: Filsafat Pengetahuan*. Pustaka Filsafat: Yogyakarta

Kaelan. 2005. *Metode Penelitian Kualitatif bidang Filsafat*. Paradigma: Yogyakarta

Koento Wibisono. *Skema kelahiran dan Perkembangan Ilmu Pengetahuan – filsafat pengetahuan – filsafat ilmu (hand out)*

Koento Wibisono. 1992. *Dinamika Ekonomi dan IPTEK*

Poespoprodjo, W. 1997. *Aktualitas Filsafat Ilmu – Ke Arah Kemasakan Praktek dan Pengelolaan Ilmu*. Universitas Padjajaran

Salam, Burhanuddin. 1997. *Logika Materil Filsafat Ilmu Pengetahuan*. Rineka Cipta: Jakarta

Saleh, firdaus. 2005. *Teknologi tepat guna , masyarakat dan kebudayaan: suatu pendekatan yang diterapkan pada agribisnis usaha kecil menengah*. Kreasi Wacana: Bandung

Santosa, Heru. 2000. *Landasan etis bagi perkembangan teknologi (Studi Kebijakan pemakaian bahan bakar migas)*. PT. Tiara Wacana Yogya: Yogyakarta

Zen,M.T, (Editor). 1982. *Sains Teknologi dan Hari Depan Manusia*. Gramedia: Yogyakarta

Haryatmoko,. 2016. *Critical Discourse Analysis (Analisis Wacana Kritis) Landasan Teori, Metodologi dan Penerapan*. Depok: PT. Rajagrafindo Persada